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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|----------------|----------------------|-------------------------|-----------------|
| 09/674,292 | 08/01/2001 | Andrew P. McMahon | 21508-022 Nat | 5115 |
| 7 | 590 10/08/2002 | | | |
| Ingrid A Beattie | | | EXAMINER | |
| Mintz Levin Cohn Ferris Glovsky And Popeo One Financial Center | | | NICHOLS, CHRISTOPHER J | |
| Boston, MA 02111 | | ART UNIT | PAPER NUMBER | |
| | | | 1647 | 1// |
| | | | DATE MAILED: 10/08/2002 | <i>IH</i> |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | T | | | |
|---|---|--|--|--|--|
| _ | Application No. | Applicant(s) | | | |
| Office Action Summany | 09/674,292 | MCMAHON ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| The MAN INO DATE of this account of | Christopher Nichols, Ph.D. | 1647 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | |
| 1) Responsive to communication(s) filed on <u>08 N</u> | lovember 2001 . | | | | |
| 2a)☐ This action is FINAL . 2b)⊠ Thi | s action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | |
| 4) Claim(s) 1-20 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6) Claim(s) is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) <u>1-20</u> are subject to restriction and/or election requirement. Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the | - · · · · · · · · · · · · · · · · · · · | , , | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | | (PTO-413) Paper No(s) ratent Application (PTO-152) | | | |

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DETAILED ACTION

Election/Restrictions

- 1. Restriction is required under 35 U.S.C. 121 and 372.
- 2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
- 3. In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-9, drawn to an enriched population of mammalian dopaminergic neuron precursor cells.

Group 2, claim(s) 10-16, drawn to an enriched population of mammalian hippocampal neuron precursor cells.

Group 3, claim(s) 14-16, drawn to a method of treating a heterogeneous population of neural cell precursor cells to enrich for dorsal neural precursor cells.

Group 4, claim(s) 17-20, drawn to a method of inducing neuronal regeneration in an adult mammal suffering from a neurodegenerative disorder.

- 4. The inventions listed as Groups 1, 2, 3, and 4 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:
- 5. Group 1 recites the technical features of differentiating cells into dopaminergic neurons in the absence of a Wnt-1 class polypeptide, which is not required by the other Groups.
- 6. Group 2 recites the technical features of differentiating cells into hippocampal neurons in the absence of a Wnt-3a polypeptide, which is not required by the other Groups.
- 7. Group 3 recites the technical features of stimulating cell proliferation of a dorsal neural precursor cell, which is not required by the other Groups.
- 8. Group 4 recites the technical features of cell transplantation, which is not required by the other Groups.
- 9. This application contains claims directed to the following patentably distinct species of the claimed invention:
 - a. Wnt-1

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b. Wnt-2

- c. Wnt-3a
- d. Wnt-7a
- e. Wnt-7b
- 10. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 4 is generic.

11. If applicant selects Invention I, one species from the Wnt class polypeptide group must be chosen to be fully responsive.

- 12. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.
- 13. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).
- 14. This application contains claims directed to the following patentably distinct species of the claimed invention:
 - f. Parkinson's Disease
 - g. Amyotrophic Lateral Sclerosis
 - h. Diffuse Lewy Body Disease
 - i. Cortical-basal Ganglionic Degeneration
 - j. Hallervorden-Spatz Disease
 - k. Myoclonic Epilepsy
- 15. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 4 is generic.

16. If applicant selects Invention IV, one species from the neurodegenerative disorder group must be chosen to be fully responsive.

17. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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18. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

- 19. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 20. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher James Nichols, Ph.D. whose telephone number is (703) 305-3955. The examiner can normally be reached on Monday through Friday, 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, Ph.D. can be reached on 703-308-4623. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications. The fax phone numbers for the customer service center is 703-872-9305.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

CJN

October 3rd, 2002

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